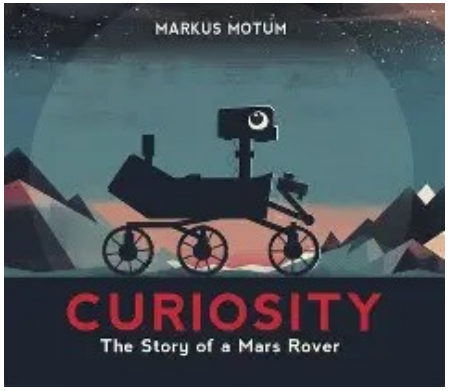
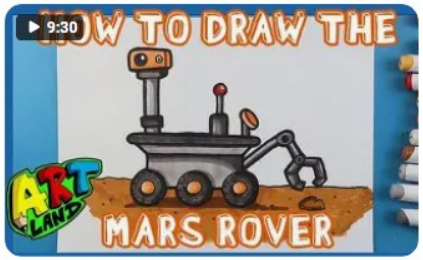




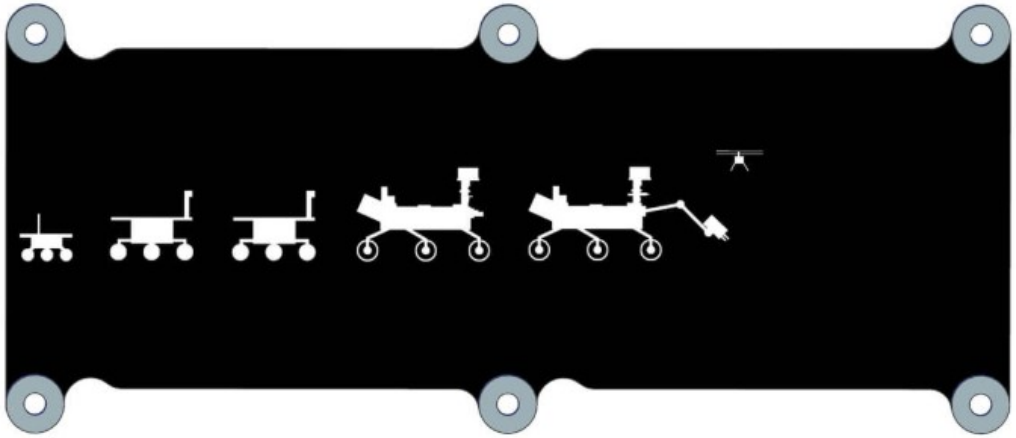
How to draw a Mars Rover: https://

www.youtube.com/watch?v=oTPB_wRGyKM&t=2s

The Short Answer:

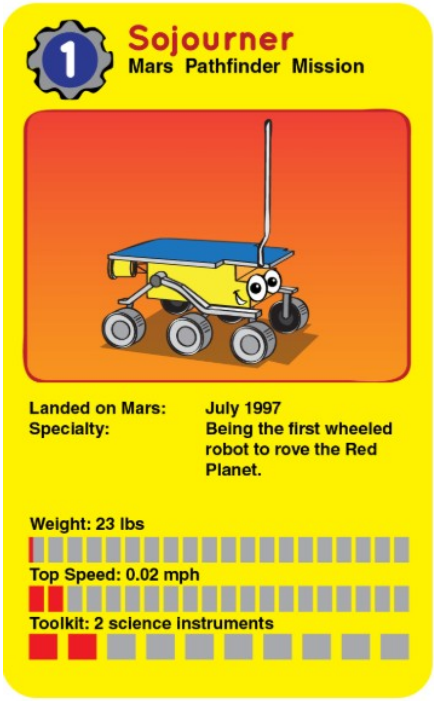
What are the Mars rovers?

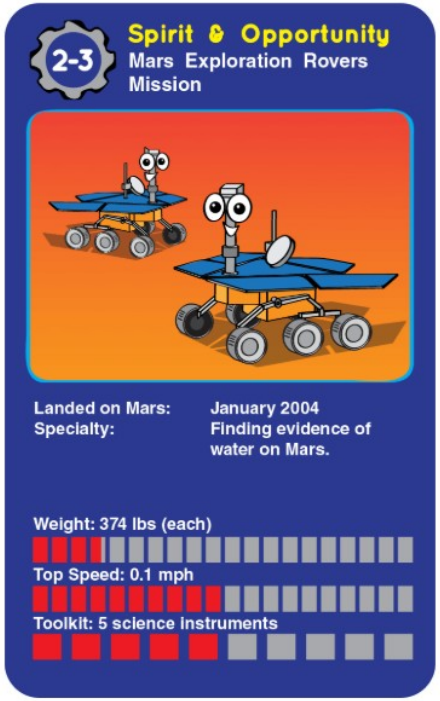
Over the years, NASA has sent five robotic vehicles, called rovers, to Mars. The names of the five rovers are: Sojourner, Spirit and Opportunity, Curiosity, and Perseverance.

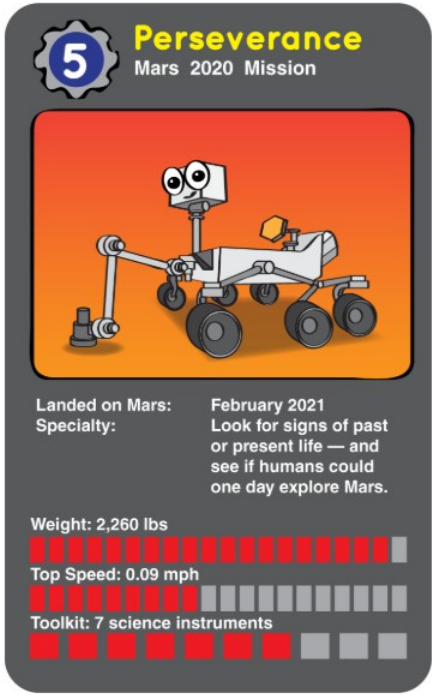


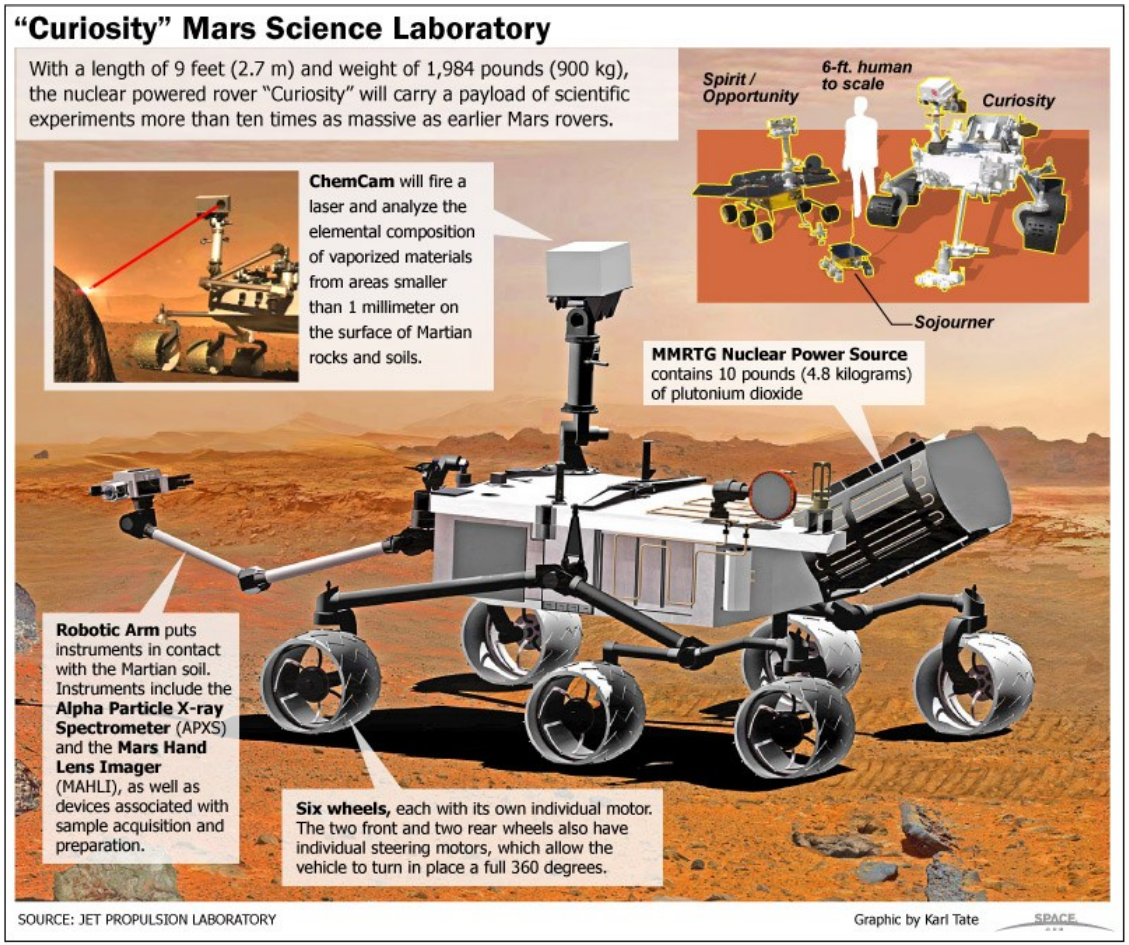
This image depicts all of the rovers which have driven on Mars, as well as the Mars helicopter. The artwork is etched onto a metal plate attached to the deck of the Mars Perseverance rover. Credit: NASA/JPL-Caltech

Mars is a fascinating planet. It's icy cold and covered in reddish dust and dirt. Like Earth, it has volcanoes, gullies, and flat plains. Scientists can also see channels that look like they were carved by rivers and streams a long, long time ago. Over the years, we've sent four robotic vehicles, or **rovers**, to learn more about Mars. And NASA's fifth Mars rover, Perseverance, landed on the Red Planet in February 2021!









Useful Websites:

NASA Scientist (Space Place: Explore Earth and Space!) https://spaceplace.nasa.gov/mars-rovers/en/

NASA Scientist (Space Place: Explore Earth and Space! Rover Games) https://spaceplace.nasa.gov/search/rover/

National Geographic Kids (Facts about Mars) https://www.natgeokids.com/uk/discover/science/space/facts-about-mars/

NASA (10 Things About Curiosity) https://science.nasa.gov/missions/mars-science-laboratory/10-things-about-mars-curiosity/

NASA Jet Propulsion Laboratory (Rover Simulation) https://www.youtube.com/watch?v=P4boyXQuUIw&t=294s

Story Time from Space (Curiosity: The Story of A Mars Rover) https://www.youtube.com/watch?v=cacSDQMA29Y&t=27s

Rover: A robot vehicle sent to explore other planets or moons. Rovers move around to collect information and take pictures.
Lunar Rover: A special rover used to explore the Moon.
Mars Rover: A rover designed to explore the surface of Mars.
Axle: A straight rod that connects wheels and helps them spin. Rovers use axles to help their wheels turn together.
Wheels: Round parts that help the rover move. Rovers have special wheels designed for rocky or dusty ground.
Mechanical Arm: A moving robot arm that helps a rover collect soil, drill into rocks, or do experiments.
Sensor: A tool that can detect things like heat, movement, or chemicals. Rovers use sensors to study their surroundings.
Camera: A device that takes pictures or videos. Rovers have cameras to help scientists see what the rover sees.
Solar Panel: A flat panel that collects energy from the Sun. Some rovers use solar panels to power their batteries.
Nuclear Battery: Control device - Used to temporarily cllose a circuit, like ringing a door bell.
Communication System: A system that lets the rover send messages and data back to Earth.
Insulation: Material that keeps the rover's inside parts safe from very hot or very cold temperatures.
Navigation: The way a rover knows where to go and how to avoid danger. Some rovers can drive themselves using cameras and sensors.
Robotic: Something that is controlled by a computer or machine, not a human.
Exploration: Traveling to learn more about a place. Rovers are used for space exploration.
Spacecraft: A vehicle that travels in space. Rovers are carried to the Moon or Mars by a spacecraft.
Dust Storm: Strong winds that blow dust across the surface of a planet like Mars. These can cover solar panels or damage parts.
Surface: The top layer of the Moon, Mars, or another planet where the rover moves around.
Mission: A special job or trip planned by space agencies like NASA or ESA to explore space.
Sample: A small piece of soil, rock, or dust collected by a rover to study.